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- (71) Applicants (for all designated States except US):
 AUBURN UNIVERSITY [US/US]; 309 Samford Hall,
 Auburn University, AL 36849 (US). UNIVERSITY OF
 CENTRAL FLORIDA [US/US]; 4000 Central Florida
 Boulevard, Orlando, FL 32816 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DANIELL, Henry [US/US]; 1255 Marina Point, #315, Casselberry, FL 32707 (US). WYCOFF, Keith [US/US]; 2339 Carmel Drive, Palo Alto, CA 94303 (US).

- (74) Agents: WEISER, Gerard, J. et al.; 1600 Market Street, Suite 3600, Philadelphia, PA 19103-7286 (US).
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(54) Title: PRODUCTION OF ANTIBODIES IN TRANSGENIC PLASTIDS

(57) Abstract: This invention provides compositions and methods for the transformation of plastids of plant cells with multiple genes, and proper association or assembly of multimeric proteins that are heterologous to the plastids of plant cells. A plasmid construct encoding all of the individual polypeptide components of the multimeric protein is provided. Stable integration of the heterologous coding sequences into the plastid genome of the target plant is accomplished through homologous recombination. The present invention achieves assembly of immunoglobulin heavy and light chains, with covalent bonding between the chains, into immunologically active immunoglobulins in the chloroplast.